CHAPTER **13**

Change Card Settings

This chapter explains how to change line and threshold settings on Cisco ONS 15454 cards.

Before You Begin

Before performing any of the following procedures, investigate all alarms and clear any trouble conditions. Refer to the *Cisco ONS 15454 Troubleshooting Guide* as necessary.

⚠ **Caution** Changing card settings can be service affecting. You should make all changes during a scheduled maintenance window.

This section lists the chapter procedures (NTPs). Turn to a procedure for applicable tasks (DLPs).

1. NTP-A88 Modify Line Settings and PM Parameter Thresholds for Electrical Cards, page 13-2—As needed, complete this procedure to change line and threshold settings for all electrical cards (EC-1, DS-1, DS-3, and DS3MX-6).

2. NTP-A89 Modify Line Settings and PM Parameter Thresholds for OC-N Cards, page 13-19—As needed, complete this procedure to change line and threshold settings for all optical (OC-N) cards.

3. NTP-A206 Modify Line Settings and PM Parameter Thresholds for TXP_MR_10G Cards, page 13-24—As needed, complete this procedure to change line and threshold settings for TXP_MR_10G (transponder) cards.

4. NTP-A207 Modify Line Settings and PM Parameter Thresholds for MXP_2.5G_10G Cards, page 13-32—As needed, complete this procedure to change line and threshold settings for MXP_2.5G_10G (muxponder) cards.

5. NTP-A237 Modify Line Settings and PM Parameter Thresholds for TXP_MR_2.5G and TXPP_MR_2.5G Cards, page 13-42—As needed, complete this procedure to change line and threshold settings for TXP_MR_2.5G and TXPP_MR_2.5G (transponder) cards.

6. NTP-A90 Modify Alarm Interface Controller Settings, page 13-52—As needed, complete this procedure to change external alarms and controls (environmental alarms) and/or orderwire settings.

7. NTP-A118 Modify Alarm Interface Controller-International Settings, page 13-55—As needed, complete this procedure to change external alarms and controls and/or orderwire settings.

8. NTP-A91 Upgrade DS-1 and DS-3 Protect Cards from 1:1 Protection to 1:N Protection, page 13-58—As needed, complete this procedure to change the protection type on DS-1 or DS-3 cards.

9. NTP-A229 Modify Line Settings and PM Parameter Thresholds for Optical Service Channel Cards, page 13-63—As needed, complete this procedure to change the optical service channel card settings.

10. NTP-A230 Modify Line Settings and PM Parameter Thresholds for Amplifier Cards, page 13-68—As needed, complete this procedure to change the amplifier card settings.

11. NTP-A231 Modify Line Settings and PM Parameter Thresholds for Multiplexer and Demultiplexer Cards, page 13-73—As needed, complete this procedure to change the multiplexer and demultiplexer card settings.

NTP-A88 Modify Line Settings and PM Parameter Thresholds for Electrical Cards

Purpose	This procedure changes the line and threshold settings for electrical cards; This procedure does not apply to DWDM (Software R4.5) nodes.
Tools/Equipment	None
Prerequisite Procedures	NTP-A17 Install the Electrical Cards, page 2-16
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to change the electrical card settings. If you are already logged in, proceed to Step 2.

Step 2   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7 to preserve the existing database.

Step 3   Perform any of the following tasks as needed:

- DLP-A165 Change Line and Threshold Settings for the DS1-14 or DS1N-14 Cards, page 13-3
- DLP-A166 Change Line and Threshold Settings for the DS3-12 or DS3N-12 Cards, page 13-6
- DLP-A167 Change Line and Threshold Settings for the DS3E-12 or DS3N-12E Cards, page 13-8
- DLP-A168 Change Line and Threshold Settings for the DS3XM-6 Card, page 13-12
- DLP-A169 Change Line and Threshold Settings for the EC1-12 Card, page 13-16

Step 4   When you are finished changing the card settings, complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A165 Change Line and Threshold Settings for the DS1-14 or DS1N-14 Cards

Purpose	This task changes the line and threshold settings for the DS1-14 or DS1N-14 (DS-1) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In the node view, double-click the DS1-14 or DS1N-14 card where you want to change the line or threshold settings.

Step 2 Click the **Provisioning** tab.

Step 3 Depending on the setting you need to modify, click the **Line**, **Line Thresholds**, **Elect Path Thresholds**, or **Sonet Thresholds** tab.

Note See Chapter 9, "Manage Alarms" for information about the Alarm Behavior tab.

Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 13-1. For definitions of the Line Threshold settings, see Table 13-2. For definitions of the Electrical Path settings, see Table 13-3.

Step 5 Click **Apply**.

Step 6 Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.

Table 13-1 describes the values on the Provisioning > Line tabs for the DS-1 cards.

Table 13-1   Line Options for DS1-14 and DS1N-14 Cards

Parameter	Description	Options
Port #	Port number	1 to 14 (read-only)
Port	Port name	User-defined, up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
Line Type	Defines the line framing type	• D4 • ESF - Extended Super Frame • Unframed
Line Coding	Defines the DS-1 transmission coding type	• AMI - Alternate Mark Inversion (default) • B8ZS - Bipolar 8 Zero Substitution

Table 13-1   Line Options for DS1-14 and DS1N-14 Cards (continued)

Parameter	Description	Options
Line Length	Defines the distance (in feet) from the backplane connection to the next termination point	• 0 - 131 • 132 - 262 • 263 - 393 • 394 - 524 • 525 - 655
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments.

Table 13-2 describes the values on the Provisioning > Line Thresholds tabs for the DS-1 cards.

Table 13-2   Line Thresholds Options for DS1-14 and DS1N-14 Cards

Parameter	Description	Options
Port	Port number	1 to 14 (read-only)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
LOSS	Number of one-second intervals containing one or more loss of signal (LOS) defects	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.

Table 13-3 describes the values on the Provisioning > Elect Path Thresholds tabs for the DS-1 cards.

Table 13-3   Electrical Path Threshold Options for DS1-14 and DS1N-14 Cards

Parameter	Description	Options
Port	Port number	1 - 14 (read-only)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.

Table 13-3   Electrical Path Threshold Options for DS1-14 and DS1N-14 Cards (continued)

Parameter	Description	Options
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
SAS	Severely errored frame/alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
AISS	Alarm indication signal seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.

Table 13-4 describes the values on the Provisioning > SONET Thresholds tabs for the DS-1 cards.

Table 13-4   SONET Threshold Options for DS1-14 and DS1N-14 Cards

Parameter	Description	Options
Port #	DS-1 ports partitioned for STS	Read-only Line 1, STS 1, Line 2, STS 1 Line 3, STS 1, Line 4 STS 1
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End, STS termination).
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End, STS termination).
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End, STS termination).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End, STS termination).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End, STS termination).

> **Note** The threshold value displays after the circuit is created.

Step 7 Return to your originating procedure (NTP).

DLP-A166 Change Line and Threshold Settings for the DS3-12 or DS3N-12 Cards

Purpose	This task changes the line and threshold settings for the DS3-12 or DS3N-12 (DS-3) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the DS3-12 or DS3N-12 card where you want to change the line or threshold settings.

Step 2 Click the **Provisioning** tab.

Step 3 Depending on the setting you need to modify, click the **Line**, **Line Thrshld**, **Elec Path Thrshld**, or **Sonet Thrshld** subtab.

> **Note** See Chapter 9, "Manage Alarms" for information about the Alarm Behavior tab.

Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 13-5. For definitions of the Line Threshold settings, see Table 13-6. For definitions of the SONET Threshold settings, see Table 13-7.

Step 5 Click **Apply**.

Step 6 Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.

Table 13-5 describes the values on the Provisioning > Line tabs for the DS-3 cards.

Table 13-5   Line Options for DS3-12 or DS3N-12 Cards

Parameter	Description	Options
Port #	Port number	1 - 12
Port	Port name	User-defined, up to 32 alphanumeric/ special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
Line Length	Defines the distance (in feet) from backplane connection to the next termination point	• 0 - 225 (default) • 226 - 450

Table 13-5   Line Options for DS3-12 or DS3N-12 Cards (continued)

Parameter	Description	Options
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
AINS Soak	Automatic in-service soak	Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. 0 to 48 hours, 15 minutes increments.

Table 13-6 describes the values on the Provisioning > Line Thresholds tabs for the DS-3 cards.

Table 13-6   Line Threshold Options for DS3-12 or DS3N-12 Cards

Parameter	Description	Options
Port #	Port number	1 - 12
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
LOSS	Loss of signal; number of one-second intervals containing one or more LOS defects	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.

Table 13-7 describes the values on the Provisioning > SONET Thresholds tabs for the DS-3 cards.

Table 13-7   SONET Threshold Options for DS3-12 or DS3N-12 Cards

Parameter	Description	Options
Port #	DS-3 ports partitioned for STS	Read-only Line 1, STS 1, Line 2, STS 1 Line 3, STS 1, Line 4 STS 1
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).

Table 13-7   SONET Threshold Options for DS3-12 or DS3N-12 Cards (continued)

Parameter	Description	Options
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).

Note   The threshold value displays after the circuit is created.

Step 7   Return to your originating procedure (NTP).

DLP-A167 Change Line and Threshold Settings for the DS3E-12 or DS3N-12E Cards

Purpose	This task changes the line and threshold settings for the DS3E-12 or DS3N-12E (DS3E) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note   If the DS3E is installed in an ONS 15454 slot that is provisioned for a DS-3 card, the DS3E enhanced performance monitoring parameters are unavailable. If this occurs, remove the DS3E from the ONS 15454, delete the DS-3 card in CTC using the "DLP-A191 Delete a Card" task on page 2-28, and provision the slot for the DS3E using the "NTP-A115 Preprovision a Slot" procedure on page 2-29.

Step 1   Double-click the DS3E-12 or DS3N-12E card where you want to change the line or threshold settings.

Step 2   Click the **Provisioning** tab.

Step 3   Depending on the setting you need to modify, click the **Line**, **Line Thrshld**, **Elect Path Thrshld**, or **Sonet Thrshld** subtab.

> ✎
> **Note**   See Chapter 9, "Manage Alarms" for information about the Alarm Behavior tab.

Step 4   Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 13-8. For definitions of the Line Threshold settings, see Table 13-9. For definitions of the Electrical Path Thresholds, see Table 13-10. For definitions of the SONET Threshold settings, see Table 13-11.

Step 5   Click **Apply**.

Step 6   Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.

Table 13-8 describes the values on the Provisioning > Line tabs for the DS3E cards.

Table 13-8   Line Options for the DS3-12E and DS3N-12E Cards

Parameter	Description	Options
Port #	Port number	1 - 12 (Read-only)
Port	Port name	User-defined, up to 32 alphanumeric/ special characters. Blank by default.
		See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
Line Type	Defines the line framing type	• M13 • C Bit • Auto Provisioned
Detected Line Type	Displays the detected line type	Read-only
Line Coding	Defines the DS3E transmission coding type	B3ZS
Line Length	Defines the distance (in feet) from backplane connection to the next termination point	• 0 - 225 (default) • 226 - 450
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15-minute increments.

Table 13-9 describes the values on the Provisioning > Line Thresholds tabs for the DS3E cards.

Table 13-9   Line Threshold Options for the DS3-12E and DS3N-12E Cards

Subtab	Parameter	Description	Options
Port #	Port number	1 - 12 (Read-only)	Port #
Line Thrshold	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	LOSS	Loss of signal; number of one-second intervals containing one or more LOS defects	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.

Table 13-10 describes the values on the Provisioning > Elect Path Thresholds tabs for the DS3E cards.

Table 13-10 Electrical Path Options for the DS3-12E and DS3N-12E Cards

Subtab	Parameter	Description	Options
Port #	Port number	1 - 12 (Read-only)	Port #
Elect Path Thrshld	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).

Table 13-10 Electrical Path Options for the DS3-12E and DS3N-12E Cards (continued)

Subtab	Parameter	Description	Options
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
	SAS	Severely errored frame/alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
	AIS	Alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
	UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).

Table 13-11 describes the values on the Provisioning > SONET Thresholds tabs for the DS3E cards.

Table 13-11 SONET Threshold Options for DS3-12E and DS3N-12E Cards

Parameter	Description	Options
Port #	DS-3 ports partitioned for STS	Read-only Line 1, STS 1, Line 2, STS 1 Line 3, STS 1, Line 4 STS 1
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).

Table 13-11 SONET Threshold Options for DS3-12E and DS3N-12E Cards (continued)

Parameter	Description	Options
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).

Note The threshold value displays after the circuit is created.

Step 7 Return to your originating procedure (NTP).

DLP-A168 Change Line and Threshold Settings for the DS3XM-6 Card

Purpose	This task changes the line and threshold settings for the DS3XM-6 card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note The DS3XM-6 (transmux) card can accept up to six channelized DS-3 signals and convert each signal to 28 VT1.5 signals. Conversely, the card can take 28 T-1s and multiplex them into a channeled C-bit or M13 framed DS-3.

Step 1 In node view, double-click the DS3XM-6 card where you want to change the line or threshold settings.

Step 2 Click the **Provisioning** tab.

Step 3 Depending on the setting you need to modify, click the **Line**, **Line Thrshld**, **Elect Path Thrshld**, or **Sonet Thrshld** subtab.

Note See Chapter 9, "Manage Alarms" for information about the Alarm Behavior tab.

Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 13-12. For definitions of the Line Threshold settings, see Table 13-13. For definitions of the Electrical Path Thresholds, see Table 13-14. For definitions of the SONET Threshold settings, see Table 13-15.

Step 5 Click **Apply**.

Step 6 Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.

Table 13-12 describes the values on the Provisioning > Line tabs for the DS3XM-6 cards.

Table 13-12 Line Options for the DS3XM-6 Parameters

Parameter	Description	Options
Port #	Port number	1 - 6 (read-only)
Port	Port name	User-defined, up to 32 alphanumeric/ special characters. Blank by default
		See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
Line Type	Defines the line framing type	• M13 - default • C BIT
Line Coding	Defines the DS-1 transmission coding type that is used	B3ZS
Line Length	Defines the distance (in feet) from backplane connection to the next termination point	• 0 - 225 (default) • 226 - 450
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments.

Table 13-13 lists the line threshold options for DS3XM-6 cards.

Table 13-13 Line Threshold Options for the DS3XM-6 Card

Parameter	Description	Options
Port #	Port number	1 - 6 (read-only)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.

Table 13-13 Line Threshold Options for the DS3XM-6 Card (continued)

Parameter	Description	Options
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
LOSS	Loss of signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.

Table 13-14 describes the values on the Provisioning > Elect Path Thresholds tabs for the DS3XM-6 cards.

Table 13-14 Electrical Path Threshold Options for the DS3XM-6 Card

Parameter	Description	Options
Port #	Port number	1 - 6 (read-only)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).
SAS	Severely errored frame/alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).

Table 13-14 Electrical Path Threshold Options for the DS3XM-6 Card (continued)

Parameter	Description	Options
AISS	Alarm indication signal seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).

Table 13-15 describes the values on the Provisioning > SONET Thresholds tabs for the DS3XM-6 cards.

Table 13-15 SONET Threshold Options for the DS3XM-6 Card

Parameter	Description	Options
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (STS and VT Term).
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (STS and VT Term).
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (STS and VT Term).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (STS and VT Term).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (STS and VT Term).

Note   The threshold value displays after the circuit is created.

Step 7   Return to your originating procedure (NTP).

DLP-A169 Change Line and Threshold Settings for the EC1-12 Card

Purpose	This task changes the line and threshold settings for the EC1-12 (EC-1) card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the EC-1 card where you want to change the line or threshold settings.

Step 2 Click the **Provisioning** tab.

Step 3 Depending on the setting you need to modify, click the **Line**, **Thresholds,** or **STS** subtab.

> ✎
>
> **Note** See Chapter 9, "Manage Alarms" for information about the Alarm Behavior tab.

Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 13-16. For definitions of the threshold settings, see Table 13-17.

Step 5 Click **Apply**.

Step 6 Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.

> ✎
>
> **Note** The STS subtab is used to provision intermediate path performance monitoring (IPPM). To provision IPPM, circuits must be provisioned on the EC1-12 card. For circuit creation procedures, go to Chapter 8, "Create Circuits and VT Tunnels." To provision IPPM, go to the "DLP-A121 Enable/Disable Pointer Justification Count Performance Monitoring" task on page 10-19.

Table 13-16 Line Options for the EC1-12 card

Parameter	Description	Options
Port #	EC-1 card port #	1 - 12 (read-only)
Port Name	Name assigned to the port (optional)	User-defined, up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
PJStsMon#	Sets the STS that will be used for pointer justification. If set to zero, no STS is used.	• 0 (default) • 1
Line Length (feet)	Defines the distance (in feet) from backplane to next termination point	• 0 - 225 (default) • 226 - 450

Table 13-16 Line Options for the EC1-12 card (continued)

Parameter	Description	Options
Rx Equalization	For early EC1-12 card versions, equalization can be turned off if the line length is short or the environment is extremely cold; Rx Equalization should normally be set to On	• On (checked, default) • Off (unchecked)
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS

Table 13-17 lists the threshold options for EC-12 cards.

Table 13-17 Threshold Options for the EC1-12 Card

SONET Layer	Parameter	Description	Options
	Port #	EC-1 card port #	1 - 12 (read-only)
Line	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	PPJC-PDET	Positive Pointer Justification Count, STS Path Detected	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	NPJC-PDET	Negative Pointer Justification Count, STS Path Detected	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	PPJC-PGEN	Positive Pointer Justification Count, STS Path Generated	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	NPJC-PGEN	Negative Pointer Justification Count, STS Path Generated	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.

Table 13-17 Threshold Options for the EC1-12 Card (continued)

SONET Layer	Parameter	Description	Options
	PSC	Protection Switching Count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	PSD	Protection Switching Duration	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
Section	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End only).
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	SEFS	Severely errored framing seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
Path	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End).
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.
	UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click Refresh.

Step 7   Return to your originating procedure (NTP).

NTP-A89 Modify Line Settings and PM Parameter Thresholds for OC-N Cards

Purpose	This procedure changes the line and threshold settings for optical cards. This procedure does not apply to DWDM (Software R4.5) nodes.
Tools/Equipment	None
Prerequisite Procedures	NTP-A16 Install the OC-N Cards, page 2-13
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to change the OC-N card settings. If you are already logged in, proceed to Step 2.

Step 2   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Step 3   Perform any of the following tasks as needed:

- DLP-A170 Change Line Transmission Settings for OC-N Cards, page 13-19
- DLP-A171 Change Threshold Settings for OC-N Cards, page 13-21
- DLP-A172 Change an Optical Port to SDH, page 13-23

Step 4   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A170 Change Line Transmission Settings for OC-N Cards

Purpose	This task changes the line transmission settings for OC-N cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the OC-N card where you want to change the line settings.

Step 2   Click the **Provisioning > Line** tabs.

Step 3   Modify any of the settings described in Table 13-18.

Note   The STS subtab is used to provision intermediate path performance monitoring (IPPM). To provision IPPM, circuits must be provisioned on the EC1-12 card.

Table 13-18 OC-N Card Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 (OC-12, OC-48, OC-192) • 1-4 (OC-3, OC12-4)
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
SF BER Level	Sets the signal fail bit error rate	• 1E-3 • 1E-4 • 1E-5
SD BER Level	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
Provides Synch	If checked, the card is provisioned as a network element timing reference	• Yes • No (Read-only)
Enable Synch Messages	Enables synchronization status messages (S1 byte), which allow the node to choose the best timing source	• Yes • No
Send Do Not Use	When checked, sends a DUS (do not use) message on the S1 byte	• Yes • No
PJSTSMon #	Sets the STS that will be used for pointer justification. If set to 0, no STS is monitored. Only one STS can be monitored on each OC-N port.	• 0 - 3 (OC-3, per port) • 0 - 12 (OC-12) • 0 - 48 (OC-48) • 0 - 192 (OC-192)
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS

Table 13-18 OC-N Card Line Settings (continued)

Parameter	Description	Options
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments.
Type	Defines the port as SONET or SDH. The Enable Sync Msg field and the Send Do Not Use field must be disabled before the port can be set to SDH.	• Sonet • SDH

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A171 Change Threshold Settings for OC-N Cards

Purpose	This task changes threshold settings for OC-N cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the OC-N card where you want to change the threshold settings.

Step 2   Click the **Provisioning > Thresholds** tabs.

Step 3   Modify any of the settings found in Table 13-19.

Table 13-19 OC-N Threshold Options

Parameter	Description	Options
Port	Port number	• 1 (OC-12, OC-48, OC-192) • 1-4 (OC-3, OC12-4)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click Refresh.
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click Refresh.

Table 13-19 OC-N Threshold Options (continued)

Parameter	Description	Options
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click Refresh.
SEFS	Severely errored framing seconds	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click Refresh.
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals for Line. Select the bullet and click Refresh. or Path (Near and Far End)
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals for Line or Path (Near and Far End). Select the bullet and click Refresh.
PPJC-PDET	Positive Pointer Justification Count, STS Path detected.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.
NPJC-PDET	Negative Pointer Justification Count, STS Path detected.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.
PPJC-PGEN	Positive Pointer Justification Count, STS Path generated.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.
NPJC-PGEN	Negative Pointer Justification Count, STS Path generated.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.
PSC	Protection Switching Count (Line)	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.
PSD	Protection Switch Duration (Line)	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.
PSC-W	Protection Switching Count - Working line BLSR is not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.
PSD-W	Protection Switching Duration - Working line BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.

Table 13-19 OC-N Threshold Options (continued)

Parameter	Description	Options
PSC-S	Protection Switching Duration - Span BLSR is not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.
PSD-S	Protection Switching Duration - Span BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.
PSC-R	Protection Switching Count - Ring BLSR is not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.
PSD-R	Protection Switching Duration - Ring BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click Refresh.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A172 Change an Optical Port to SDH

Purpose	This task provisions a port on an OC-N card for SDH.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the OC-N card where you want to provision a port for SDH.

Step 2   Click the **Provisioning > Line** tabs.

Step 3   In the Type field, specify the port and choose SDH.

Note   Before you can change the port type to SDH, ensure the following: the EnableSyncMsg and SendDoNotUse fields are unchecked, the card is not part of a BLSR or 1+1 protection group, the card is not part of an orderwire channel, and the card is not a SONET DCC/GCC termination point.

Step 4 Click **Apply**.

Step 5 If the card is a multiport OC-N card, for example a four-port OC-3, eight-port OC-3, or four-port OC-12, you can repeat Steps 3 and 4 for any other ports on that card.

Step 6 Return to your originating procedure (NTP).

NTP-A206 Modify Line Settings and PM Parameter Thresholds for TXP_MR_10G Cards

Purpose	This procedure changes the line and threshold settings for TXP_MR_10G (transponder) cards. This procedure applies to both DWDM (Software R4.5) and non-DWDM (Software R4.1 and earlier) nodes.
Tools/Equipment	None
Prerequisite Procedures	NTP-A249 Install the Transponder and Muxponder Cards, page 2-15
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to change the transponder card settings. If you are already logged in, proceed to Step 2.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Step 3 Perform any of the following tasks as needed:

- DLP-A274 Change Card Settings for TXP_MR_10G Cards, page 13-25
- DLP-A275 Change Line Settings for TXP_MR_10G Cards, page 13-26
- DLP-A276 Change Line Threshold Settings for TXP_MR_10G Cards, page 13-27
- DLP-A277 Change Optical Thresholds Settings for TXP_MR_10G Cards, page 13-28
- DLP-A278 Change Section Trace Settings for TXP_MR_10G Cards, page 13-29
- DLP-A279 Change Optical Transport Network Settings for TXP_MR_10G Cards, page 13-30

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A274 Change Card Settings for TXP_MR_10G Cards

Purpose	This task changes the card settings for TXP_MR_10G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the TXP_MR_10G card where you want to change the line settings.

Step 2   Click the **Provisioning > Card** tabs.

Step 3   Modify any of the settings described in Table 13-20.

Table 13-20 TXP_MR_10G (Transponder) Card Settings

Parameter	Description	Options
Payload Type	Sets the type of payload	• SONET/10 GigE WAN Phy • SDH • 10 GigE LAN Phy
Termination Mode	Sets the mode of operation	• Transparent • Line
Wavelength	Sets the wavelength of the DWDM side optical transmitter	• First Tunable Wavelength • (Further wavelengths in 100 GHz ITU spacing)
Regeneration Peer Slot	Sets the regeneration peer slot	• None • 1 • 2 • 3 • 4 • 5 • 6 • 12 • 13 • 14 • 15 • 16 • 17

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A275 Change Line Settings for TXP_MR_10G Cards

Purpose	This task changes the line settings for TXP_MR_10G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the TXP_MR_10G card where you want to change the line settings.

Step 2   Click the **Provisioning > Line** tab.

Step 3   Modify any of the settings described in Table 13-21.

Table 13-21 TXP_MR_10G (Transponder) Card Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
SF BER Level	Sets the signal fail bit error rate	• 1E-3 • 1E-4 • 1E-5
SD BER Level	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS

Table 13-21 TXP_MR_10G (Transponder) Card Line Settings (continued)

Parameter	Description	Options
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments.
ALS Mode	Sets the automatic laser shutdown function	• Disabled • Auto Restart • Manual Restart • Manual Restart for Test

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).

DLP-A276 Change Line Threshold Settings for TXP_MR_10G Cards

Purpose	This task changes the line threshold settings for TXP_MR_10G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the TXP_MR_10G card where you want to change the line threshold settings.

Step 2 Click the **Provisioning > Line Thresholds** tabs.

Step 3 Modify any of the settings described in Table 13-22.

Table 13-22 TXP_MR_10G (Transponder) Card Line Thresholds Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2
CV	Coding violations	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.

Table 13-22 TXP_MR_10G (Transponder) Card Line Thresholds Settings (continued)

Parameter	Description	Options
ES	Errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
SES	Severely errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
SEFS	Severely errored framing seconds	Numeric. Can be set for Far End, for 15-minute or one-day intervals, for Section only. Select bullet and click Refresh button.
FC	Failure count	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select bullet and click Refresh button.
UAS	Unavailable seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select bullet and click Refresh button.

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).

DLP-A277 Change Optical Thresholds Settings for TXP_MR_10G Cards

Purpose	This task changes the optical threshold settings for TXP_MR_10G(Transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the OC-N card where you want to change the optical threshold settings.

Step 2 Click the **Provisioning > Optical Thresholds** tabs.

Step 3 Modify any of the settings described in Table 13-23.

Table 13-23 TXP_MR_10G (Transponder) Card Optical Thresholds Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2
Laser Bias High (%)	Sets the warning threshold for low laser bias current	Numeric, in percent range 0 to 100
RX Power High (dBm)	Sets the warning threshold for high receiver input power	Numeric, in dBm range –40.0 to +30.0
RX Power Low (dBm)	Sets the warning threshold for low receiver input power	Numeric, in dBm range –40.0 to +30.0
TX Power High (dBm)	Sets the warning threshold for high transmitter output power	Numeric, in dBm range –40.0 to +30.0
TX Power Low (dBm)	Sets the warning threshold for low transmitter output power	Numeric, in dBm range –40.0 to +30.0

Step 4   Click **Apply**.

Step 5   Click the **Alarm** radio button and click **Refresh**.

Step 6   Modify any of the settings described in Table 13-23.

Step 7   Click **Apply**.

Step 8   Return to your originating procedure (NTP).

DLP-A278 Change Section Trace Settings for TXP_MR_10G Cards

Purpose	This task changes the section trace settings for TXP_MR_10G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the TXP_MR_10G card where you want to change the section trace settings.

Step 2   Click the **Provisioning > Section Trace** tab.

Step 3   Modify any of the settings described in Table 13-24.

Table 13-24 TXP_MR_10G (Transponder) Card Section Trace Settings

Parameter	Description	Options
Port #	Port number	• 1 • 2
Trace Mode	Sets the trace mode	• Off/None • Manual
Section Trace String Size	Sets the trace string size	• 1 byte • 16 byte
Transmit	Displays the current transmit string; sets a new transmit string	String of trace string size
Expected	Displays the current expected string; sets a new expected string	String of trace string size
Received	Displays the current received string (read only)	String of trace string size

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A279 Change Optical Transport Network Settings for TXP_MR_10G Cards

Purpose	This task changes the line optical transport network (OTN) settings for TXP_MR_10G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the TXP_MR_10G card where you want to change the OTN settings.

Step 2   Click the **Provisioning > OTN** tabs.

Step 3   Modify any of the settings described in Table 13-25.

Table 13-25 TXP_MR_10G (Transponder) Card OTN Settings

Parameter	Description	Options
OTN Lines Port #	Port number (read-only)	2
OTN Lines G.709 OTN	Sets the OTN lines according to ITU-T G.709	• Enabled • Disabled

Table 13-25 TXP_MR_10G (Transponder) Card OTN Settings (continued)

Parameter	Description	Options
OTN Lines FEC	Sets the OTN lines to forward error correction (FEC)	• Enabled • Disabled
OTN Lines SF BER	Sets the signal fail bit error rate	• 1E-5
OTN Lines SD BER	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
G.709 Thresholds Port	Port number (read-only)	2
G.709 Thresholds ES	Errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds SES	Severely errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds UAS	Unavailable seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds BBE	Background block errors	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds FC	Failure counter	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
FEC Thresholds Port	Port number (read-only)	2
FEC Thresholds	Bit Errors Corrected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	Uncorrectable Words	Numeric. Can be set for 15-minute or one-day intervals.
Trail Trace Identifier	Level	• Section • Path

Table 13-25 TXP_MR_10G (Transponder) Card OTN Settings (continued)

Parameter	Description	Options
Trail Trace Identifier Trace Mode	Sets the trace mode	• Off/None • Manual
Trail Trace Identifier Transmit	Displays the current transmit string; sets a new transmit string	String of trace string size; trail trace identifier is 64 bytes in length.
Trail Trace Identifier Expected	Displays the current expected string; sets a new expected string	String of trace string size
Trail Trace Identifier Received	Displays the current received string (read only)	String of trace string size

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

NTP-A207 Modify Line Settings and PM Parameter Thresholds for MXP_2.5G_10G Cards

Purpose	This procedure changes the line and threshold settings for MXP_2.5G_10G (muxponder) cards. This procedure applies to both DWDM (Software R4.5) and non-DWDM (Software R4.1 and earlier) nodes.
Tools/Equipment	None
Prerequisite Procedures	NTP-A249 Install the Transponder and Muxponder Cards, page 2-15
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to change the muxponder card settings. If you are already logged in, proceed to Step 2.

Step 2   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Step 3   Perform any of the following tasks as needed:

- DLP-A280 Change Card Settings for MXP_2.5G_10G Cards, page 13-33

- DLP-A281 Change Line Settings for MXP_2.5G_10G Cards, page 13-35

- DLP-A282 Change Line Thresholds Settings for MXP_2.5G_10G Cards, page 13-36

- DLP-A283 Change Optical Thresholds Settings for MXP_2.5G_10G Cards, page 13-38
- DLP-A284 Change Section Trace Settings for MXP_2.5G_10G Cards, page 13-39
- DLP-A285 Change Optical Transport Network Settings for MXP_2.5G_10G Cards, page 13-40

Step 4   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A280 Change Card Settings for MXP_2.5G_10G Cards

Purpose	This task changes the card settings for MXP_2.5G_10G (muxponder) cards, including payload type, termination mode, and wavelength.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the MXP_2.5G_10G card where you want to change the card settings.

Step 2   Click the **Provisioning > Card** tabs.

Step 3   Modify any of the settings described in Table 13-26.

Table 13-26 MXP_2.5G_10G (Muxponder) Card Settings

Parameter	Description	Options
Payload Type	Sets the type of payload	• OC3 • OC12 • OC48 • STM1 • STM4 • STM16 • 1G Ethernet • 1G Fiber Channel/FICON • 2G Fiber Channel/FICON • ESCON • DV6000 • SDI/D1 Video • HDTV • Pass Through
Termination Mode	Sets the mode of operation	• Transparent • Section • Line
Wavelength	Sets the wavelength of the DWDM side optical transmitter	• First Tunable Wavelength • (Further wavelengths in 100 GHz ITU spacing)
Regeneration Peer Slot	Sets the regeneration peer slot	• None • 1 • 2 • 3 • 4 • 5 • 6 • 12 • 13 • 14 • 15 • 16 • 17
Regeneration Group Name	Sets the regeneration peer group name.	User defined.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A281 Change Line Settings for MXP_2.5G_10G Cards

Purpose	This task changes the line settings for MXP_2.5G_10G (muxponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Double-click the MXP_2.5G_10G card where you want to change the line settings.

Step 2   Click the **Provisioning > Line** tab.

Step 3   Modify any of the settings described in Table 13-27.

Table 13-27 MXP_2.5G_10G (Muxponder) Card Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2 • 3 • 4 • 5
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
SF BER Level	Sets the signal fail bit error rate	• 1E-3 • 1E-4 • 1E-5
SD BER Level	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9

Table 13-27 MXP_2.5G_10G (Muxponder) Card Line Settings (continued)

Parameter	Description	Options
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service	• IS • OOS • OOS_MT • OOS_AINS
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments
ALS Mode	Sets the automatic laser shutdown function	• Disabled • Auto Restart • Manual Restart • Manual Restart for Test
Provides Sync	If checked, the card is provisioned as a network element timing reference	• Yes • No (Read-only)
Enable Sync Msg	Enables synchronization status messages (S1 byte), which allow the node to choose the best timing source	• Yes • No
Send DoNotUse	When checked, sends a DUS (do not use) message on the S1 byte	• Yes • No

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A282 Change Line Thresholds Settings for MXP_2.5G_10G Cards

Purpose	This task changes the line threshold settings for MXP_2.5G_10G (Muxponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the MXP_2.5G_10G card where you want to change the line threshold settings.

Step 2   Click the **Provisioning > Line Thresholds** tabs.

Step 3   Modify any of the settings described in Table 13-28.

Table 13-28 MXP_2.5G_10G (Muxponder) Card Line Threshold Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2 • 3 • 4 • 5
CV	Coding violations	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
ES	Errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
SES	Severely errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
SEFS	Severely errored framing seconds	Numeric. Can be set for Far End, for 15-minute or one-day intervals, for Section only. Select bullet and click Refresh button.
FC	Failure count	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select bullet and click Refresh button.
UAS	Unavailable seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select bullet and click Refresh button.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A283 Change Optical Thresholds Settings for MXP_2.5G_10G Cards

Purpose	This task changes the optical threshold settings for MXP_2.5G_10G (muxponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the MXP_2.5G_10G card where you want to change the optical threshold settings.

Step 2 Click the **Provisioning > Optical Thresholds** tabs.

Step 3 Modify any of the settings described in Table 13-29.

Table 13-29 MXP_2.5G_10G (Muxponder) Card Optical Thresholds Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2 • 3 • 4 • 5
Laser Bias Low (%)	Sets the warning threshold for low laser bias current	Numeric, in percent range 0 to 100
RX Power High (dBm)	Sets the warning threshold for high receiver input power	Numeric, in dBm range –40.0 to +30.0
RX Power Low (dBm)	Sets the warning threshold for low receiver input power	Numeric, in dBm range –40.0 to +30.0
TX Power High (dBm)	Sets the warning threshold for high transmitter output power	Numeric, in dBm range –40.0 to +30.0
TX Power Low (dBm)	Sets the warning threshold for low transmitter output power	Numeric, in dBm range –40.0 to +30.0

Step 4 Click **Apply**.

Step 5 Click the **Alarm** radio button and click **Refresh**.

Step 6 Modify any of the settings described in Table 13-23.

Step 7 Click **Apply**.

Step 8 Return to your originating procedure (NTP).

DLP-A284 Change Section Trace Settings for MXP_2.5G_10G Cards

Purpose	This task changes the section trace settings for MXP_2.5G_10G (muxponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the MXP_2.5G_10G card where you want to change the section trace settings.

Step 2 Click the **Provisioning > Section Trace** tabs.

Step 3 Modify any of the settings described in Table 13-30.

Table 13-30 MXP_2.5G_10G (Muxponder) Card Section Trace Settings

Parameter	Description	Options
Port #	Port number	• 1 • 2 • 3 • 4 • 5
Trace Mode	Sets the trace mode	• Off/None • Manual
Section Trace String Size	Sets the trace string size	• 1 byte • 16 byte
Transmit	Displays the current transmit string; sets a new transmit string	String of trace string size
Expected	Displays the current expected string; sets a new expected string	String of trace string size
Received	Displays the current received string (read only)	String of trace string size

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).

DLP-A285 Change Optical Transport Network Settings for MXP_2.5G_10G Cards

Purpose	This task changes the line OTN settings for MXP_2.5G_10G (muxponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the MXP_2.5G_10G card where you want to change the OTN settings.

Step 2 Click the **Provisioning > OTN** tabs.

Step 3 Modify any of the settings described in Table 13-31.

Table 13-31 MXP_2.5G_10G (Muxponder) Card OTN Settings

Parameter	Description	Options
OTN Lines Port #	Port number (read-only)	5
OTN Lines G.709 OTN	Sets the OTN lines according to ITU-T G.709	• Enabled • Disabled
OTN Lines FEC	Sets the OTN lines to forward error correction (FEC)	• Enabled • Disabled
OTN Lines SF BER	Sets the signal fail bit error rate	• 1E-5
OTN Lines SD BER	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
G.709 Thresholds Port	Port number (read-only)	5
G.709 Thresholds ES	Errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds SES	Severely errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.

Table 13-31 MXP_2.5G_10G (Muxponder) Card OTN Settings (continued)

Parameter	Description	Options
G.709 Thresholds UAS	Unavailable seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds BBE	Background block errors	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds FC	Failure counter	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
FEC Thresholds Port	Port number (read-only)	5
FEC Thresholds	Bit Errors Corrected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	Uncorrectable Words	Numeric. Can be set for 15-minute or one-day intervals.
Trail Trace Identifier Level	Level	• Section • Path
Trail Trace Identifier Trace Mode	Sets the trace mode	• Off/None • Manual
Trail Trace Identifier Transmit	Displays the current transmit string; sets a new transmit string	String of trace string size; trail trace identifier is 64 bytes in length.
Trail Trace Identifier Expected	Displays the current expected string; sets a new expected string	String of trace string size
Trail Trace Identifier Received	Displays the current received string (read only)	String of trace string size

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

NTP-A237 Modify Line Settings and PM Parameter Thresholds for TXP_MR_2.5G and TXPP_MR_2.5G Cards

Purpose	This procedure changes the line and threshold settings for TXP_MR_2.5G and TXPP_MR_2.5G (transponder) cards. This procedure applies to DWDM (Software R4.5) and non-DWDM (Software R4.1 and earlier) nodes.
Tools/Equipment	None
Prerequisite Procedures	NTP-A249 Install the Transponder and Muxponder Cards, page 2-15.
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to change the transponder card settings. If you are already logged in, proceed to Step 2.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Step 3 Perform any of the following tasks as needed:

- DLP-A471 Change Card Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards, page 13-42
- DLP-A472 Change Line Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards, page 13-44
- DLP-A473 Change Line Threshold Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards, page 13-46
- DLP-A474 Change Optical Thresholds Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards, page 13-48
- DLP-A475 Change Section Trace Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards, page 13-49
- DLP-A476 Change Optical Transport Network Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards, page 13-50

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A471 Change Card Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards

Purpose	This task changes the card settings for TXP_MR_2.5G and TXPP_MR_2.5G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the TXP_MR_2.5G or TXPP_MR_2.5G card where you want to change the line settings.

Step 2   Click the **Provisioning > Card** tabs.

Step 3   Modify any of the settings described in Table 13-32.

Table 13-32 TXP_MR_2.5G and TXPP_MR_2.5G (Transponder) Card Settings

Parameter	Description	Options
Payload Type	Sets the type of payload	• OC3 • OC12 • OC48 • STM1 • STM4 • STM16 • 1G Ethernet • 1G Fiber Channel/FICON • 2G Fiber Channel/FICON • ESCON • DV6000 • SDI/D1 Video • HDTV • Pass Through
Termination Mode	Sets the mode of operation (option only supported for SONET/SDH payloads)	• Transparent • Section • Line
Wavelength	Sets the wavelength of the DWDM side optical transmitter	• First Tunable Wavelength • (Further wavelengths in 100 GHz ITU spacing) **Note** The four available wavelengths are listed in the Card Parameters section of the window.

Table 13-32 TXP_MR_2.5G and TXPP_MR_2.5G (Transponder) Card Settings (continued)

Parameter	Description	Options
Regeneration Peer Slot	Sets the regeneration peer slot	• None • 1 • 2 • 3 • 4 • 5 • 6 • 12 • 13 • 14 • 15 • 16 • 17
Regeneration Group Name	Sets the regeneration peer group name.	User defined.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A472 Change Line Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards

Purpose	This task changes the line settings for TXP_MR_2.5G and TXPP_MR_2.5G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the TXP_MR_2.5G or TXPP_MR_2.5G card where you want to change the line settings.

Step 2   Click the **Provisioning > Line** tabs.

Step 3   Modify any of the settings described in Table 13-33.

Table 13-33 TXP_MR_2.5G and TXPP_MR_2.5G (Transponder) Card Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2 • 3 (TXPP_MR_2.5G card only)
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
SF BER Level	Sets the signal fail bit error rate (OC-N and STM-N payloads only)	• 1E-5
SD BER Level	Sets the signal degrade bit error rate (OC-N and STM-N payloads only)	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
AINS Soak	Automatic in-service soak (OC-N and STM-N payloads only)	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments.
ALS Mode	Sets the automatic laser shutdown function	• Disabled • Auto Restart • Manual Restart • Manual Restart for Test

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).

DLP-A473 Change Line Threshold Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards

Purpose	This task changes the line threshold settings for TXP_MR_2.5G and TXPP_MR_2.5G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the TXP_MR_2.5G or TXPP_MR_2.5G card where you want to change the line threshold settings.

Step 2 Click the **Provisioning > Line Thresholds** tabs.

Step 3 Modify any of the settings as follows:

- For OC-3/STM-1, OC-12/STM-4, and OC-48/STM16 payloads, see Table 13-34.
- For 1G Ethernet, 1G and 2G fiber channel/FICON payloads, see Table 13-35.

Table 13-34 TXP_MR_2.5G and TXPP_MR_2.5G (Transponder) Card Line Thresholds Settings for OC-3/STM-1, OC-12/STM-4, and OC-48/STM-16 Payloads

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2 • 3 (TXPP_MR_2.5G card only)
CV	Coding violations	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section, or Line. Select the bullet and click Refresh.
ES	Errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section, or Line. Select the bullet and click Refresh.
SES	Severely errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section, or Line. Select the bullet and click Refresh.
SEFS	Severely errored framing seconds (section only)	Numeric. Can be set for Far End, for 15-minute or one-day intervals for Section only. Select the bullet and click Refresh.

Table 13-34 TXP_MR_2.5G and TXPP_MR_2.5G (Transponder) Card Line Thresholds Settings for OC-3/STM-1, OC-12/STM-4, and OC-48/STM-16 Payloads (continued)

Parameter	Description	Options
FC	Failure count (line only)	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals for Line only. Select the bullet and click Refresh.
UAS	Unavailable seconds (line only)	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click Refresh.

Table 13-35 TXP_MR_2.5G and TXPP_MR_2.5G (Transponder) Card Line Thresholds Settings for 1G Ethernet, 1G Fiber Channel/FICON Payloads

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2 • 3 (TXPP_MR_2.5G card only)
Valid Packets	Number of valid packets	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click Refresh.
Invalid Packets	Number of invalid packets	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click Refresh.
Code Group Violations	Number of code group violations	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click Refresh.
Idle Ordered Sets	Number of idle ordered sets	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click Refresh.
Non Idle Ordered Sets	Number of non-idle ordered sets	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click Refresh.
Data Code Groups	Number of data code groups (excluding ordered sets)	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click Refresh.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A474 Change Optical Thresholds Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards

Purpose	This task changes the optical threshold settings for TXP_MR_2.5G and TXPP_MR_2.5G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the TXP_MR_2.5G or TXPP_MR_2.5G card where you want to change the optical threshold settings.

Step 2   Click the **Provisioning > Optical Thresholds** tabs.

Step 3   Modify any of the settings described in Table 13-36.

Table 13-36 TXP_MR_2.5G and TXPP_MR_2.5G (Transponder) Card Optical Thresholds Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2 • 3 (TXPP_MR_2.5G only)
Laser Bias Low (%)	Sets the warning threshold for low laser bias current	Numeric, in percent range 0 to 100 (client side) range 0 to 100 (trunk side)
RX Power High (dBm)	Sets the warning threshold for high receiver input power	Numeric, in dBm range –40.0 to +30.0 (client side) range –40.0 to +30.0 (trunk side)
RX Power Low (dBm)	Sets the warning threshold for low receiver input power	Numeric, in dBm range –40.0 to +30.0 (client side) range –40.0 to +30.0 (trunk side)
TX Power High (dBm)	Sets the warning threshold for high transmitter output power	Numeric, in dBm range –40.0 to +30.0 (client side) — (trunk side)
TX Power Low (dBm)	Sets the warning threshold for low transmitter output power	Numeric, in dBm range –40.0 to +30.0 (client side) — (trunk side)

Step 4   Click **Apply**.

Step 5   Click the **Alarm** radio button and click **Refresh**.

Step 6   Modify any of the settings described in Table 13-23.

Step 7   Click **Apply**.

Step 8   Return to your originating procedure (NTP).

DLP-A475 Change Section Trace Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards

Purpose	This task changes the section trace settings for TXP_MR_2.5G and TXPP_MR_2.5G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the TXP_MR_2.5G or TXPP_MR_2.5G card where you want to change the section trace settings.

Step 2   Click the **Provisioning > Section Trace** tab.

Step 3   Modify any of the settings described in Table 13-37.

Table 13-37 TXP_MR_2.5G and TXPP_MR_2.5G (Transponder) Card Section Trace Settings

Parameter	Description	Options
Port #	Port number	• 1 • 2 • 3 (TXPP_MR_2.5G only)
Trace Mode	Sets the trace mode	• Off/None • Manual
Section Trace String Size	Sets the trace string size	• 1 byte • 16 byte
Transmit	Displays the current transmit string; sets a new transmit string	String of trace string size
Expected	Displays the current expected string; sets a new expected string	String of trace string size
Received	Displays the current received string (read only)	String of trace string size

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).

DLP-A476 Change Optical Transport Network Settings for TXP_MR_2.5G and TXPP_MR_2.5G Cards

Purpose	This task changes the line optical transport network (OTN) settings for TXP_MR_2.5G and TXPP_MR_2.5G (transponder) cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the TXP_MR_2.5G or TXPP_MR_2.5G card where you want to change the OTN settings.

Step 2 Click the **Provisioning > OTN** tabs.

Step 3 Modify any of the settings described in Table 13-38.

Table 13-38 TXP_MR_2.5G and TXPP_MR_2.5G (Transponder) Card OTN Settings

Parameter	Description	Options
OTN Lines Port #	Port number (read-only)	2
OTN Lines G.709 OTN	Sets the OTN lines according to ITU-T G.709	• Enabled • Disabled
OTN Lines FEC	Sets the OTN lines to forward error correction (FEC)	• Enabled • Disabled
OTN Lines SF BER	Sets the signal fail bit error rate	• 1E-5
OTN Lines SD BER	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
G.709[1] Thresholds Port	Port number (read-only)	2

Table 13-38 TXP_MR_2.5G and TXPP_MR_2.5G (Transponder) Card OTN Settings (continued)

Parameter	Description	Options
G.709 Thresholds ES	Errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds SES	Severely errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds UAS	Unavailable seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds BBE	Background block errors	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds FC	Failure counter	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
FEC Thresholds Port	Port number (read-only)	2
FEC Thresholds	Bit Errors Corrected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	Uncorrectable Words	Numeric. Can be set for 15-minute or one-day intervals.
Trail Trace Identifier	Level	• Section • Path
Trail Trace Identifier Trace Mode	Sets the trace mode	• Off/None • Manual
Trail Trace Identifier Transmit	Displays the current transmit string; sets a new transmit string	String of trace string size; trail trace identifier is 64 bytes in length.
Trail Trace Identifier Expected	Displays the current expected string; sets a new expected string	String of trace string size
Trail Trace Identifier Received	Displays the current received string (read only)	String of trace string size

      1. Latency for 1G-FC payload without G.709 is 4 microseconds, with G.709 is 40 microseconds. Latency for 2G-FC payload without G.709 is 2 microseconds, with G.709 is 20 microseconds. Consider these values when planning a FC network that is sensitive to latency.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

NTP-A90 Modify Alarm Interface Controller Settings

Purpose	This procedure provisions the AIC card to receive input from, or send output to, external devices wired to the backplane (called external alarms and controls or environmental alarms) or to change orderwire settings. This procedure applies to DWDM (Software R4.5) and non-DWDM (Software R4.1 and earlier) nodes.
Tools/Equipment	None
Prerequisite Procedures	NTP-A32 Provision External Alarms and Controls on the Alarm Interface Controller, page 9-33
	DLP-A83 Provision Orderwire, page 8-94.
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to change the AIC card settings. If you are already logged in, proceed to Step 2.

Step 2   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Step 3   Perform any of the following tasks as needed:

- DLP-A173 Change External Alarms Using the AIC Card, page 13-53
- DLP-A174 Change External Controls Using the AIC Card, page 13-53
- DLP-A175 Change Orderwire Settings Using the AIC Card, page 13-54

Step 4   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A173 Change External Alarms Using the AIC Card

Purpose	This task changes external alarm settings on the AIC card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Confirm that external-device relays are wired to the ENVIR ALARMS IN backplane pins. See the "DLP-A19 Install Alarm Wires on the Backplane" task on page 1-37 for more information.

Step 2   In node view, double-click the AIC card to display it in card view.

Step 3   Click the **Provisioning > External Alarms** tabs.

Step 4   Modify any of the following fields for each external device wired to the ONS 15454 backplane. For definitions of these fields, see the "NTP-A32 Provision External Alarms and Controls on the Alarm Interface Controller" procedure on page 9-33.

- Enabled
- Alarm Type
- Severity
- Virtual Wire
- Raised When
- Description

Step 5   To provision additional devices, complete Step 4 for each additional device.

Step 6   Click **Apply**.

Step 7   Return to your originating procedure (NTP).

DLP-A174 Change External Controls Using the AIC Card

Purpose	This task changes external control settings on the AIC card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Verify the external control relays to the ENVIR ALARMS OUT backplane pins. See the "DLP-A19 Install Alarm Wires on the Backplane" task on page 1-37 for more information.

Step 2   In node view, double-click the AIC card to display it in card view.

Step 3   Click the **Provisioning > External Controls** tabs.

Step 4   Modify any of the following fields for each external control wired to the ONS 15454 backplane. For definitions of these fields, see the "NTP-A32 Provision External Alarms and Controls on the Alarm Interface Controller" procedure on page 9-33.

- Enabled
- Trigger Type
- Control Type
- Description

Step 5   To provision additional controls, complete Step 4 for each additional device.

Step 6   Click **Apply**.

Step 7   Return to your originating procedure (NTP).

DLP-A175 Change Orderwire Settings Using the AIC Card

Purpose	This task changes orderwire settings on the AIC card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

⚠

Caution   When provisioning orderwire for ONS 15454s residing in a ring, do not provision a complete orderwire loop. For example, a four-node ring typically has east and west ports provisioned at all four nodes. However, to prevent orderwire loops, provision two orderwire ports (east and west) at all but one of the ring nodes.

🔍

Tip   Before you begin, make a list of the ONS 15454 slots and ports that require orderwire communication.

Step 1   In node view, double-click the AIC to display it in card view.

Step 2   Click the **Provisioning > Local Orderwire** tabs or **Provisioning > Express Orderwire** tabs, depending on the orderwire path that you want to create.

Step 3   If needed, adjust the Tx and Rx dBm by moving the slider to the right or left for the headset type (four-wire or two-wire) that you will use. In general, you should not need to adjust the dBm.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

NTP-A118 Modify Alarm Interface Controller-International Settings

Purpose	This procedure provisions the AIC-I card to receive input from, or send output to, external devices wired to the backplane (called external alarms and controls or environmental alarms), or to change orderwire settings. This procedure applies to DWDM (Software R4.5) and non-DWDM (Software R4.1 and earlier) nodes.
Tools/Equipment	None
Prerequisite Procedures	NTP-A248 Provision External Alarms and Controls on the Alarm Interface Controller-International, page 9-35 and the DLP-A83 Provision Orderwire, page 8-94
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to change the AIC-I card settings. If you are already logged in, proceed to Step 2.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Step 3 Perform any of the following tasks as needed:

- DLP-A208 Change External Alarms Using the AIC-I Card, page 13-55
- DLP-A209 Change External Controls Using the AIC-I Card, page 13-56
- DLP-A210 Change AIC-I Card Orderwire Settings, page 13-57

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A208 Change External Alarms Using the AIC-I Card

Purpose	This task changes external alarm settings on the AIC-I card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note The procedure is the same if you are using the Alarm Expansion panel (AEP). In this case, the number of contacts that are shown on the screen is changed accordingly.

Step 1 Confirm that external-device relays are wired to the ENVIR ALARMS IN backplane pins. See the "DLP-A19 Install Alarm Wires on the Backplane" task on page 1-37 for more information.

Step 2 Double-click the AIC-I card to display it in card view.

Step 3 Click the **Provisioning > External Alarms** tabs.

Step 4 Modify any of the following fields for each external device wired to the ONS 15454 backplane. For definitions of these fields, see the "NTP-A248 Provision External Alarms and Controls on the Alarm Interface Controller-International" procedure on page 9-35.

- Enabled
- Alarm Type
- Severity
- Virtual Wire
- Raised When
- Description

Step 5 To provision additional devices, complete Step 4 for each additional device.

Step 6 Click **Apply**.

Step 7 Return to your originating procedure (NTP).

DLP-A209 Change External Controls Using the AIC-I Card

Purpose	This task changes external control settings on the AIC-I card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note The procedure is the same if you are using the Alarm Expansion panel (AEP). In this case, the number of contacts that are shown on the screen is changed accordingly.

Step 1 Verify the external control relays to the ENVIR ALARMS OUT backplane pins. See the "DLP-A19 Install Alarm Wires on the Backplane" task on page 1-37 for more information.

Step 2 In node view, double-click the AIC-I card to display it in card view.

Step 3 On the **External Controls** subtab, modify any of the following fields for each external control wired to the ONS 15454 backplane. For definitions of these fields, see the "NTP-A248 Provision External Alarms and Controls on the Alarm Interface Controller-International" procedure on page 9-35.

- Enabled
- Trigger Type
- Control Type

• Description

Step 4   To provision additional controls, complete Step 4 for each additional device.

Step 5   Click **Apply**.

Step 6   Return to your originating procedure (NTP).

DLP-A210 Change AIC-I Card Orderwire Settings

Purpose	This task changes orderwire settings on the AIC-I card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

⚠

Caution   When provisioning orderwire for ONS 15454s residing in a ring, do not provision a complete orderwire loop. For example, a four-node ring typically has east and west ports provisioned at all four nodes. However, to prevent orderwire loops, provision two orderwire ports (east and west) at all but one of the ring nodes.

🔍

Tip   Before you begin, make a list of the ONS 15454 slots and ports that require orderwire communication.

Step 1   In node view, double-click the AIC-I card to display it in card view.

Step 2   Click the **Provisioning > Local Orderwire** tabs or the **Provisioning > Express Orderwire** tabs, depending on the orderwire path that you want to create. Provisioning steps are the same for both types of orderwire.

Step 3   If needed, adjust the Tx and Rx dBm by moving the slider to the right or left for the headset type (four-wire or two-wire) that you will use. In general, you should not need to adjust the dBm.

Step 4   If you want to turn on the audible alert (buzzer) for the orderwire, check the **Buzzer On** check box.

Step 5   Click **Apply**.

Step 6   Return to your originating procedure (NTP).

NTP-A91 Upgrade DS-1 and DS-3 Protect Cards from 1:1 Protection to 1:N Protection

Purpose	This procedure converts DS-1 and DS-3 protect cards from 1:1 to 1:N protection. This procedure does not apply to DWDM (Software R4.5) nodes.
Tools/Equipment	None
Prerequisite Procedures	DLP-A71 Create a 1:1 Protection Group, page 4-27.
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to convert the DS-1 or DS-3 cards from 1:1 to 1:N protection. If you are already logged in, proceed to Step 2.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Step 3 Perform any of the following tasks as needed:

- DLP-A176 Convert DS1-14 Cards From 1:1 to 1:N Protection, page 13-58
- DLP-A177 Convert DS3-12 Cards From 1:1 to 1:N Protection, page 13-60
- DLP-A178 Convert DS3-12E Cards From 1:1 to 1:N Protection, page 13-61

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A176 Convert DS1-14 Cards From 1:1 to 1:N Protection

Purpose	This task converts DS1-14 cards in a 1:1 protection scheme to 1:N protection. A 1:N protection group can protect a maximum of five working cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Provisioning or higher

Note This procedure assumes DS1-14 cards are installed in Slots 1 through 6 and/or Slots 12 through 17. The DS1-14 cards in Slots 3 and 15, which are the protection slots, will be replaced with DS1N-14 cards. The ONS 15454 must run CTC Release 2.0 or later. The procedure also requires at least one DS1N-14 card.

Step 1 In node view, click the **Maintenance > Protection** tabs.

Step 2   Click the protection group that contains Slot 3 or Slot 15 (where you will install the DS1N-14 card).

Step 3   Make sure the slot you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby (shown in) and not Protect/Active. If the protect slot status is Protect/Active, switch traffic to the working card:

    a.   Under Selected Group, click the protect card.

    b.   Next to Switch Commands, click **Switch**.

    The working slot should change to Working/Active and the protect slot should change to Protect/Standby. If they do not change, do not continue. Troubleshoot the working card and slot to determine why the card cannot carry working traffic.

Step 4   Repeat Steps 1 through 3 for each protection group that you need to convert.

Step 5   Click the **Alarms** tab to verify that no standing alarms exist for any of the DS1-14 cards that you are converting. If alarms exist and you have difficulty clearing them, contact your next level of support.

Step 6   Click the **Provisioning > Protection** tabs.

Step 7   Click the 1:1 protection group that contains the cards that you will move into the new protection group.

Step 8   Click **Delete**.

Step 9   When the confirmation dialog box appears, click **Yes**.

> **Note**   Deleting the 1:1 protection group does not disrupt service. However, no protection bandwidth exists for the working circuits until you complete the 1:N protection procedure. Therefore, complete this procedure as quickly as possible.

Step 10   If needed, repeat Steps 7 – 9 for other DS-1 1:1 protection groups that you want to include in a 1:N group.

Step 11   Physically remove the DS1-14 card from Slot 3 or Slot 15. This raises an improper removal alarm.

Step 12   In node view, right-click the slot that held the removed card and select **Delete** from the drop-down menu. Wait for the card to disappear from node view.

Step 13   Physically insert a DS1N-14 card into the same slot.

Step 14   Verify that the card boots up properly.

Step 15   Click the **Inventory** tab and verify that the new card appears as a DS1N-14.

Step 16   Click the **Provisioning > Protection** tabs.

Step 17   Click **Create**.

Step 18   Type a name for the protection group in the Name field (optional).

Step 19   From the Type drop-down menu, choose **1:N (card)**.

Step 20   From the Protect Card drop-down menu, choose the DS1N-14 card. Verify that the correct DS1N-14 card appears in the Protect Card field.

Step 21   In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (**>>**) tab to move the cards to the Working Cards list.

Step 22   If necessary, set a new reversion time in the Reversion time drop-down menu.

> **Note**   1:N protection groups are always revertive.

Step 23   Click **OK**. The protection group appears in the Protection Groups list on the Protection subtab.

Step 24   Return to your originating procedure (NTP).

DLP-A177 Convert DS3-12 Cards From 1:1 to 1:N Protection

Purpose	This task converts DS3-12 cards in 1:1 protection to 1:N protection. A 1:N protection group can protect a maximum of five working cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Provisioning or higher

✎
Note   This procedure assumes that DS3-12 cards are installed in Slots 1 - 6 and/or Slots 12 - 17. The DS3-12 cards in Slots 3 or 15, which are the protection slots, will be replaced with DS3N-12 cards. The ONS 15454 must run CTC Release 2.0 or later. The procedure also requires at least one DS3N-12 card and a protection group with DS3-12 cards.

Step 1   In node view, click the **Maintenance > Protection** tabs.

Step 2   Click the protection group containing Slot 3 or Slot 15 (where you will install the DS3N-12 card).

Step 3   Make sure the slot you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby as shown in on page 13-59, and not Protect/Active. If the protect slot status is Protect/Active, switch traffic to the working card:

    a.   Under Selected Group, click the protect card.

    b.   Next to Switch Commands, click **Switch**.

        The working slot should change to Working/Active and the protect slot should change to Protect/Standby. If they fail to change, do not continue. Troubleshoot the working card and slot to determine why the card cannot carry working traffic.

Step 4   Repeat Steps 2 and 3 for each protection group that you need to convert.

Step 5   Click the **Alarms** tab to verify that no standing alarms exist for any of the DS3-12 cards you are converting. If alarms exist and you have difficulty clearing them, contact your next level of support.

Step 6   Click the **Provisioning > Protection** tabs.

Step 7   Click the 1:1 protection group that contains the cards that you will move into the new protection group.

Step 8   Click **Delete**.

Step 9   When the confirmation dialog box appears, click **Yes**.

✎
Note   Deleting the 1:1 protection groups will not disrupt service. However, no protection bandwidth exists for the working circuits until the 1:N protection procedure is completed. Therefore, complete this procedure as soon as possible.

Step 10   If you are deleting more than one DS-3 1:1 protection group, repeat Steps 7 through 9 for each group that you want to include in a 1:N group.

Step 11   Physically remove the protect DS3-12 card from Slot 3 or Slot 15. This raises an improper removal alarm.

Step 12   In node view, right-click the slot that held the removed card and choose **Delete** from the drop-down menu. Wait for the card to disappear from the node view.

Step 13   Physically insert a DS3N-12 card into the same slot.

Step 14   Verify that the card boots up properly.

Step 15   Click the **Inventory** tab and verify that the new card appears as a DS3N-12 card.

Step 16   Click the **Provisioning > Protection** tabs.

Step 17   Click **Create**.

Step 18   Type a name for the protection group in the Name field (optional).

Step 19   Click **Type** and choose **1:N (card)** from the drop-down menu.

Step 20   Verify that the DS3N-12 card appears in the Protect Card field.

Step 21   In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (>>) tab to move the cards to the Working Cards list.

Step 22   Click **OK**.

The protection group should appear in the Protection Groups list on the Protection subtab.

Step 23   Return to your originating procedure (NTP).

DLP-A178 Convert DS3-12E Cards From 1:1 to 1:N Protection

Purpose	This task converts DS3-12E cards in 1:1 protection to 1:N protection. A 1:N protection group can protect a maximum of five working cards.
Tools/Equipment	None
Prerequisite Procedures	"DLP-A60 Log into CTC" task on page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Provisioning or higher

Note   This task assumes that DS3-12E cards are installed in Slots 1 - 6 and/or Slots 12 - 17. The DS3-12E cards in Slots 3 or 15, which are the protection slots, will be replaced with DS3N-12E cards. The procedure requires at least one DS3N-12E card and a protection group with DS3-12E cards.

Step 1   In node view, click the **Maintenance > Protection** tab.

Step 2   Click the protection group containing Slot 3 or Slot 15 (where you will install the DS3N-12E card).

Step 3   Make sure the slot you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby as shown in on page 13-59, and not Protect/Active. If the protect slot status is Protect/Active, switch traffic to the working card:

    a.   Under Selected Group, click the protect card.

    b.   Next to Switch Commands, click **Switch**.

The working slot should change to Working/Active and the protect slot should change to Protect/Standby. If they fail to change, do not continue. Troubleshoot the working card and slot to determine why the card cannot carry working traffic.

Step 4   Repeat Steps 2 and 3 for each protection group that you need to convert.

Step 5   Click the **Alarms** tab to verify that no standing alarms exist for any of the DS3-12E cards you are converting. If alarms exist and you have difficulty clearing them, contact your next level of support.

Step 6   Click the **Provisioning > Protection** tab.

Step 7   Click the 1:1 protection group that contains the cards that you will move into the new protection group.

Step 8   Click **Delete**.

Step 9   When the confirmation dialog box appears, click **Yes**.

> ✎
>
> **Note**   Deleting the 1:1 protection groups will not disrupt service. However, no protection bandwidth exists for the working circuits until the 1:N protection procedure is completed. Do not delay when completing this procedure.

Step 10   If you are deleting more than one DS-3 1:1 protection group, repeat Steps 7 through 9 for each group that you want to include in a 1:N group.

Step 11   Physically remove the protect DS3-12E card from Slot 3 or Slot 15. This raises an improper removal alarm.

Step 12   In node view, right-click the slot that held the removed card and choose **Delete** from the drop-down menu. Wait for the card to disappear from the node view.

Step 13   Physically insert a DS3N-12E card into the same slot.

Step 14   Verify that the card boots up properly.

Step 15   Click the **Inventory** tab and verify that the new card appears as a DS3N-12E.

Step 16   Click the **Provisioning > Protection** tabs.

Step 17   Click **Create**.

Step 18   Type a name for the protection group in the Name field (optional).

Step 19   Click **Type** and choose **1:N (card)** from the drop-down menu.

Step 20   Verify that the DS3N-12E card appears in the Protect Card field.

Step 21   In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (**>>**) tab to move the cards to the Working Cards list.

Step 22   Click **OK**.

The protection group should appear in the Protection Groups list on the Protection subtab.

Step 23   Return to your originating procedure (NTP).

NTP-A229 Modify Line Settings and PM Parameter Thresholds for Optical Service Channel Cards

Purpose	This procedure changes the line and threshold settings for optical service channel cards (OSCM and OSC-CSM). This procedure applies to DWDM (Software R4.5) nodes only.
Tools/Equipment	None
Prerequisite Procedures	NTP-A242 Install the DWDM Cards, page 2-23.
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to change the OSCM or OSC-CSM card settings. If you are already logged in, proceed to Step 2.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Step 3 Perform any of the following tasks as needed:

- DLP-A477 Change Optical Line Settings for OSCM and OSC-CSM Cards, page 13-63
- DLP-A478 Change Line Threshold Settings for OSCM and OSC-CSM Cards, page 13-65
- DLP-A479 Change Optical Line Settings for OSCM and OSC-CSM Cards, page 13-66
- DLP-A480 Change Channel Settings for OSCM and OSC-CSM Cards, page 13-67

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A477 Change Optical Line Settings for OSCM and OSC-CSM Cards

Purpose	This task changes the line settings for OSCM and OSC-CSM cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the OSCM or OSC-CSM card where you want to change the line settings.

Step 2 Click the **Provisioning > OC3 Line > OC3 Line** tabs.

Step 3 Modify any of the settings described in Table 13-39.

Table 13-39 OSCM and OSC-CSM Card OC-3 Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	—
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
SF BER Level	Sets the signal fail bit error rate	• 1E-3 • 1E-4 • 1E-5
SD BER Level	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
Provides Synch	If checked, the card is provisioned as a network element timing reference	• Checked • Unchecked (Read-only)
Enable Synch Messages	Enables synchronization status messages (S1 byte), which allow the node to choose the best timing source	• Checked • Unchecked
Send Do Not Use	When checked, sends a DUS (do not use) message on the S1 byte	• Checked • Unchecked
PJSTSMon #	Sets the STS that will be used for pointer justification. If set to 0, no STS is monitored. Only one STS can be monitored on each OC-N port.	• On • Off (Read-only)
State	Places port in or out of service	• In Service • Out of Service • Out of Service MT • Out of Service AINS
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments.
Type	Defines the port as SONET or SDH. The Enable Sync Msg field and the Send Do Not Use field must be disabled before the port can be set to SDH.	• Sonet • SDH

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A478 Change Line Threshold Settings for OSCM and OSC-CSM Cards

Purpose	This task changes the optical line threshold settings for OSCM and OSC-CSM cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the OSCM or OSC-CSM card where you want to change the optical threshold settings.

Step 2   Click the **Provisioning > OC3 Line > SONET Thresholds** tabs.

Step 3   Modify any of the settings described in Table 13-40.

Table 13-40 OSCM and OSC-CSM Cards Optical Threshold Settings

Parameter	Description	Options
Port	Port number	—
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals for Line or Section (Near and Far End). Select the bullet and click Refresh.
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals for Line or Section (Near and Far End). Select the bullet and click Refresh.
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals for Line or Section (Near and Far End). Select the bullet and click Refresh.
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals for Line or Section. Select the bullet and click the Refresh button or Path (Near and Far End)
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals for Line or Section (Near and Far End). Select the bullet and click Refresh.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A479 Change Optical Line Settings for OSCM and OSC-CSM Cards

Purpose	This task changes the optical line settings for OSCM and OSC-CSM cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the OSCM or OSC-CSM card where you want to change the line settings.

Step 2   Click the **Provisioning > Optical Line > Parameters** tabs.

Step 3   Modify any of the settings described in Table 13-41.

Table 13-41 OSCM and OSC-CSM Card Line Settings

Parameter	Description	Options
Port #	Displays the port number and TX or RX.	Read-only
Port Name	Provides the ability to assign the specified port a name.	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
Status	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
Line Direction	Provides the ability to associate a card with the line direction. Use this field if you have two cards in the same shelf and must designate which one will carry the traffic flow from East to West, the second card will carry traffic from West to East.	• East to West • West to East
Type	Identifies the type of port such as Input Com, Output Com, Input Line, Output Line, Input OSC, and Output OSC.	Read only
Power	Shows the current power level per port.	Read only
VOA Mode	Shows the current functional mode of the VOA: constant gain mode, constant power mode, or not in use (N/A).	Read only

Table 13-41 OSCM and OSC-CSM Card Line Settings (continued)

Parameter	Description	Options
VOA Power Ref.	Shows the value of the optical output power going to a VOA when constant power mode is active. ANS is the only function that can modify this value.	Read only
VOA Power Calib.	The user can modify the optical output power to the VOA if necessary. This feature is normally used when the system is configured as "access" in Provisioning > WDM-ANS.	Numeric
VOA Attenuation Ref.	Shows the attenuation value of the VOA when the VOA is set in attenuation mode. ANS and APC are the only functions that can modify this value.	Read only
VOA Attenuation Calib.	The user can modify the attenuation value of the VOA if necessary when the VOA mode is set for constant attenuation.	Numeric

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).

DLP-A480 Change Channel Settings for OSCM and OSC-CSM Cards

Purpose	This task changes the optical channel threshold settings for OSCM and OSC-CSM cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the OSCM or OSC-CSM card where you want to change the optical threshold settings.

Step 2 Click the **Provisioning > Optical Line > Optics Thresholds** tabs.

Step 3 Modify any of the settings described in Table 13-42.

Table 13-42 OSCM and OSC-CSM Cards Optical Thresholds Settings

Parameter	Description	Options
Port	Port number (read-only)	—
Power Low (dBm)	Set the low power settings.	Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click Refresh.
Power High (dBm)	Set the high power settings.	Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click Refresh.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

NTP-A230 Modify Line Settings and PM Parameter Thresholds for Amplifier Cards

Purpose	This procedure changes the line and threshold settings for the OPT-PRE and OPT-BST amplifier cards. This procedure applies to DWDM (Software R4.5) nodes only.
Tools/Equipment	None
Prerequisite Procedures	NTP-A242 Install the DWDM Cards, page 2-23.
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to change the OPT-PRE or OPT-BST amplifier card settings. If you are already logged in, proceed to Step 2.

Step 2   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Step 3   Perform any of the following tasks as needed:

- DLP-A481 Change Optical Line Settings for OPT-PRE and OPT-BST Amplifiers, page 13-69
- DLP-A482 Change Line Threshold Settings for OPT-PRE and OPT-BST Amplifiers, page 13-70
- DLP-A483 Change Optical Amplifier Line Settings for OPT-PRE and OPT-BST Amplifiers, page 13-71
- DLP-A484 Change Channel Settings for OPT-PRE and OPT-BST Amplifiers, page 13-72

Step 4   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A481 Change Optical Line Settings for OPT-PRE and OPT-BST Amplifiers

Purpose	This task changes the line settings for OPT-PRE and OPT-BST amplifier cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the OPT-PRE or OPT-BST amplifier where you want to change the line settings.

Step 2   Click the **Provisioning > Optical Line > Parameters** tabs.

Step 3   Modify any of the settings described in Table 13-43.

Table 13-43 OPT-PRE and OPT-BST Amplifier Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	Displays port number and TX or RX
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
Status	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
Line Direction	Provides the ability to associate a card with the line direction. Use this field if you have two cards in the same shelf and must designate which one will carry the traffic flow from East to West, the second card will carry traffic from West to East.	• East to West • West to East
Type	Identifies the type of port such as Input Com, Output Com, Input Line, Output Line, Input OSC, and Output OSC.	Read only
Power	Shows the current power level per port.	Read only

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A482 Change Line Threshold Settings for OPT-PRE and OPT-BST Amplifiers

Purpose	This task changes the optical line threshold settings for OPT-PRE and OPT-BST amplifier cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the OPT-PRE or OPT-BST amplifier where you want to change the optical threshold settings.

Step 2 Click the **Provisioning > Optical Line > Optics Thresholds** tabs.

Step 3 Modify any of the settings described in Table 13-44.

Table 13-44 OPT-PRE and OPT-BST Amplifiers Optical Thresholds Settings

Parameter	Description	Options
Port	Port number (read-only)	—
Power Low (dBm)	Set the low power settings.	Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click Refresh.
Power High (dBm)	Set the high power settings.	Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click Refresh.

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).

DLP-A483 Change Optical Amplifier Line Settings for OPT-PRE and OPT-BST Amplifiers

Purpose	This task changes the optical amplifier line settings for OPT-PRE and OPT-BST amplifier cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the OPT-PRE or OPT-BST amplifier where you want to change the line settings.

Step 2 Click the **Provisioning > Opt. Ampli. Line > Parameters** tabs.

Step 3 Modify any of the settings described in Table 13-45.

Table 13-45 OSCM and OSC-CSM Card Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	Displays port number and TX or RX
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
Status	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
Line Direction	Provides the ability to associate a card with the line direction. Use this field if you have two cards in the same shelf and must designate which one will carry the traffic flow from East to West, the second card will carry traffic from West to East.	• East to West • West to East
Type	Identifies the type of port such as Input Com, Output Com, Input Line, Output Line, Input OSC, and Output OSC.	Read only
Power	Shows the current power level per port.	Read only
Power Ref.	Shows the total optical power going to the amplifier.	Read only
Power Calib.	The user can manually set the total optical power going to the amplifiers.	Numeric

Table 13-45 OSCM and OSC-CSM Card Line Settings (continued)

Parameter	Description	Options
Gain	The current gain of the amplifiers.	Read only
Gain Set Point	The value of the gain that the amplifier must achieve.	Read only or numeric depending on mode setting. When the system is configured as metro core, this field is read only. When the system is configured as metro access this field can be changed by the user.
Tilt Reference	This field is set to zero. It represents the default value for the amplifier tilt. In a future software release this value will be managed by APC.	Read only
Tilt Calibration	The user can manually set the amplifier tilt.	Numeric
Mode	Shows the working mode of the amplifier: control gain or control power	Read only

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).

DLP-A484 Change Channel Settings for OPT-PRE and OPT-BST Amplifiers

Purpose	This task changes the optical channel threshold settings for OPT-PRE and OPT-BST amplifier cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the OPT-PRE or OPT-BST amplifier where you want to change the optical threshold settings.

Step 2 Click the **Provisioning > Opt. Ampli. Line > Optics Thresholds** tabs.

Step 3 Modify any of the settings described in Table 13-46.

Table 13-46 OPT-PRE and OPT-BST Cards Optical Thresholds Settings

Parameter	Description	Options
Port	Port number (read-only)	—

Table 13-46 OPT-PRE and OPT-BST Cards Optical Thresholds Settings (continued)

Parameter	Description	Options
Power Low (dBm)	Set the low power settings.	Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click Refresh.
Power High (dBm)	Set the high power settings.	Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click Refresh.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

NTP-A231 Modify Line Settings and PM Parameter Thresholds for Multiplexer and Demultiplexer Cards

Purpose	This procedure changes the line and threshold settings for the multiplexer and demultiplexer. The cards included in this category are the 32 MUX, 32 DMX, and the 4MD xx.x cards. This procedure applies to DWDM (Software R4.5) nodes only.
Tools/Equipment	None
Prerequisite Procedures	NTP-A242 Install the DWDM Cards, page 2-23.
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 3-26 at the node where you want to change the 32MUX, 32DMX, or 4MD xx.x card settings. If you are already logged in, proceed to Step 2.

Step 2   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Step 3   Perform any of the following tasks as needed:

- DLP-A485 Change Optical Line Settings for Multiplexer and Demultiplexer Cards, page 13-74
- DLP-A486 Change Line Threshold Settings for Multiplexer and Demultiplexer Cards, page 13-75
- DLP-A487 Change Optical Channel Settings for Multiplexer and Demultiplexer Cards, page 13-76
- DLP-A488 Change Channel Settings for Multiplexer and Demultiplexer Cards, page 13-78

Step 4   Complete the "NTP-A108 Back Up the Database" procedure on page 17-7.

Stop. You have completed this procedure.

DLP-A485 Change Optical Line Settings for Multiplexer and Demultiplexer Cards

Purpose	This task changes the line settings for 32MUX, 32DMX, and 4MD xx.x multiplexer and demultiplexer cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the multiplexer or demultiplexer cards where you want to change the line settings.

Step 2 Click the **Provisioning > Optical Line > Parameters** tabs.

Step 3 Modify any of the settings described in Table 13-47.

Table 13-47 Multiplexer and Demultiplexer Card Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	Displays port number and TX or RX
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
Line Direction	Provides the ability to associate a card with the line direction. Use this field if you have two cards in the same shelf and must designate which one will carry the traffic flow from East to West, the second card will carry traffic from West to East.	• East to West • West to East
Type	Identifies the type of port such as Input Com, Output Com, Input Line, Output Line, Input OSC, and Output OSC.	Read only
Power	Shows the current power level per port.	Read only

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).

DLP-A486 Change Line Threshold Settings for Multiplexer and Demultiplexer Cards

Purpose	This task changes the optical line threshold settings for 32MUX, 32DMX, and 4MD xx.x multiplexer and demultiplexer cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   In node view, double-click the multiplexer or demultiplexer cards where you want to change the optical threshold settings.

Step 2   Click the **Provisioning > Optical Line > Optics Thresholds** tabs.

Step 3   Modify any of the settings described in Table 13-48.

Table 13-48   Multiplexer and Demultiplexer Amplifiers Optical Thresholds Settings

Parameter	Description	Options
Port	Port number (read-only)	—
Power Low (dBm)	Set the low power settings.	Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click Refresh.
Power High (dBm)	Set the high power settings.	Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click Refresh.

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A487 Change Optical Channel Settings for Multiplexer and Demultiplexer Cards

Purpose	This task changes the channel settings for 32MUX, 32DMX, and 4MD xx.x multiplexer and demultiplexer cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the multiplexer or demultiplexer card where you want to change the line settings.

Step 2 Click the **Provisioning > Optical Chn > Parameters** tabs.

Step 3 Modify any of the settings described in Table 13-49.

Table 13-49   Multiplexer and Demultiplexer Card Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	Displays port number and TX or RX
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 8-17.
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
Line Direction	Provides the ability to associate a card with the line direction. Use this field if you have two cards in the same shelf and must designate which one will carry the traffic flow from East to West, the second card will carry traffic from West to East.	• East to West • West to East
Type	Identifies the type of port such as Input Com, Output Com, Input Line, Output Line, Input OSC, and Output OSC.	Read only
Power	Shows the current power level per port.	Read only
VOA Mode	Shows the current functional mode of the VOA: constant gain mode, constant power mode, or not in use (N/A).	Read only

Table 13-49 Multiplexer and Demultiplexer Card Line Settings (continued)

Parameter	Description	Options
VOA Power Ref.	Shows the value of the optical output power going to a VOA when constant power mode is active. ANS is the only function that can modify this value.	Read only
VOA Power Calib.	The user can modify the optical output power to the VOA if necessary. This feature is normally used when the system is configured as "access" in Provisioning > WDM-ANS.	Numeric
VOA Attenuation Ref.	Shows the attenuation value of the VOA when the VOA is set in attenuation mode. ANS and APC are the only functions that can modify this value.	Read only
VOA Attenuation Calib.	The user can modify the attenuation value of the VOA if necessary when the VOA mode is set for constant attenuation.	Numeric
Actual Wavelength	Shows the wavelength specified by the manufacturing data. This field cannot be set manually.	Read only
Expected Wavelength	Shows the preprovisioned wavelength. This field is used to preprovsion cards. For example you can specify a generic AD-1C in Slot 15 and set the expected wavelength to 1552.52. The result is a AD-1C-52.5. If the actual equipment installed does not match the preprovisioned slot, an MEA Mismatch Equipment Alarm occurs.	Numeric

Step 4   Click **Apply**.

Step 5   Return to your originating procedure (NTP).

DLP-A488 Change Channel Settings for Multiplexer and Demultiplexer Cards

Purpose	This task changes the optical channel threshold settings for 32MUX, 32DMX, and 4MD xx.x multiplexer and demultiplexer cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the multiplexer or demultiplexer cards where you want to change the optical threshold settings.

Step 2 Click the **Provisioning > Optical Chn > Optics Thresholds** tabs.

Step 3 Modify any of the settings described in Table 13-50.

Table 13-50 Multiplexer and Demultiplexer Cards Optical Thresholds Settings

Parameter	Description	Options
Port	Port number (read-only)	—
Power Low (dBm)	Set the low power settings.	Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click Refresh.
Power High (dBm)	Set the high power settings.	Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click Refresh.

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).